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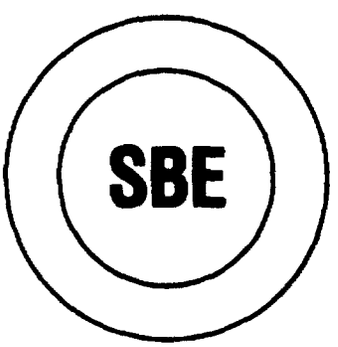
Reply Comments of the Society of Broadcast Engineers, Inc.

ET Docket 93-62

In the Matter of Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation



April 25, 1994

Society of Broadcast Engineers, Inc.
Indianapolis, Indiana

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
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Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation	)	ET Docket No. 93-62
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To: The Commission

Reply Comments of Society of Broadcast Engineers, Inc.

1. The Society of Broadcast Engineers, Incorporated (SBE), the national association of broadcast engineers and technical communications professionals, with more than 5,000 members in the United States, hereby respectfully submits its reply comments in the above-captioned proceeding relating to FCC adoption of the ANSI/IEEE C95.1-1992 Standard governing human exposure to non-ionizing radio frequency radiation.

Background

2. Most SBE members work at broadcast stations. As the highest powered class of intentional and continuous emitters of radio frequency energy, broadcasters are most heavily impacted by the proposed new standard. SBE members therefore share two concerns regarding any successor standard to ANSI C95.1-1982: first, a concern about safety aspects for those who must sometimes work near high-powered broadcast antennas, and second, the regulatory impact to the broadcast industry, and ultimately the financial health of broadcast stations and the prospect of continued employment.

SBE concurs that Commission should adopt ANSI/IEEE C95.1-1992

3. The majority of commenters agree that the Commission should adopt the ANSI/IEEE C95.1-1992 (hereinafter "ANSI 1992") standard, imperfect though it may be. The SBE concurs with this approach, in the belief that it will ultimately be less burdensome to broadcasters for the Commission to adopt ANSI 1992 and work with the Commission in implementing that standard on a practical basis rather adopting some other standard, or making no change and staying with the ANSI C95.1-1982 standard. ANSI 1992 will continue to exist regardless of any action the

Commission takes in this proceeding; by adopting ANSI 1992, the Commission will have the ability to shape the practical implementation of this new standard.

SBE agrees that induced and contact current portions of ANSI 1992 need to be held in abeyance

4. The SBE notes with concern certain aspects of ANSI 1992, specifically with respect to the first-time provisions for limits on induced and contact currents. The SBE notes that it is not alone in this concern: the comments of AFCCE, CBS *et al*, Cohen, Dippell and Everist, EEPA, Hammett & Edison, Inc., NAB, and NPR also express these concerns. Cohen, Dippell and Everist proposes that the Commission hold in abeyance enforcement of the induced and contact current portions of the ANSI 1992 standard until such time that the Commission finds (1), that practical, repeatable, commercially available, 100 MHz induced and contact current meters are available, and (2), that an updated version of OST65 providing mathematical models for predicting induced and contact currents as a function of the maximum permissible exposure (MPE) for E or H fields has been published. Hammett & Edison makes a similar proposal, but suggests a moratorium only on above-30 MHz induced and contact current measurements.

5. The SBE notes that the recently adopted Canadian radio frequency radiation (RFR) standard, Safety Code 6 (SC-6), also implemented, for the first time, limits on induced and contact currents. However, SC-6 only extends its induced and contact current limits to 30 MHz, thus recognizing that at VHF frequencies induced and contact currents are not a problem.

6. The SBE therefore concurs with the Hammett & Edison proposal that the Commission adopt a moratorium on regulation of above-30 MHz induced and contact currents. This moratorium should remain in effect until the two conditions given in Paragraph 4 are satisfied.

FCC should pre-empt any more restrictive non-federal standards

7. The comments of AMST/NBC, CBS *et al*, Cohen, Dippell and Everist, Hammett & Edison, Inc., NAB, New Jersey Broadcasters, and NPR all plead with the Commission to pre-empt the regulation of radiofrequency radiation (RFR) compliance by state, county, and local level governmental agencies. SBE agrees. The Commission must put a stop to non-federal attempts to regulate RFR, many of which are grossly arbitrary and capricious. Further, if the Commission does not now pre-empt, state, county, and local governmental agencies would not be obligated to follow any temporary policies that the Commission might adopt in this proceeding. Pre-emption has now become the critical issue for broadcasters, cellular operators, and other intentional emitters of radio

frequency energy. Failure of the Commission to pre-empt now would also have ominous implications to development of emerging technologies employing radio frequency energy.

8. Indeed, the SBE suspects that many local-government regulatory bodies, such as planning boards, zoning commissions, and the like, would be relieved to be able to point to a federal preemption policy as the reason for not being drawn into a morass of often alarmist, unscientific claims about the purported evils of radio frequency radiation.

Proposed New Jersey attempt to regulate and license RF sources must be pre-empted

9. The comments of CBS *et al*, Hammett & Edison, and New Jersey Broadcasters all brought the Commission's attention to an outrageous attempt by the State of New Jersey to begin a program of reviewing broadcast (and other) antennas for RFR compliance (albeit to the now obsolete ANSI C95.1-1982 standard) and the *licensing* of such antennas. As pointed out in the Hammett & Edison comments, the New Jersey program would entail non-trivial fees: $440 to initially register each FM and TV broadcasting antenna, and $400 per year thereafter; $280 to initially register a point-to-point microwave antenna, such as a TV STL or ICR, and $220 per year thereafter.

10. This proposed program would be duplicative of the environmental review already conducted by the Commission, and it would appear that any licensing of broadcast antennas is reserved by the Communications Act solely to the federal government. The SBE agrees with CBS *et al*, Hammett & Edison, and New Jersey Broadcasters that the Commission must not allow these proposed regulations to take effect. The Commission should come down hard, now, on the State of New Jersey to stop this significant and unwarranted expansion of state-level bureaucracy into areas that are rightly the jurisdiction of the Commission. Failure to do so will inevitably result in "me too" legislation by other states, each determined to be second to none in the "protection" of its residents, and, perhaps, also attracted to the new revenue stream such a program would generate.

SBE endorses 'Transient Passage' concept

11. The comments of CBS *et al*, NAB, and others urged the Commission to recognize the concept of "transient passage" when considering whether the "controlled" or "uncontrolled" portions of the ANSI 1992 standard apply. As noted in the CBS *et al*, comments,

"an environment may still be considered "controlled" notwithstanding the fact that members of the general public, or other non-cognizant persons, may pass through it on a transient basis."

The SBE believes this to be an entirely reasonable approach, and urges the Commission to adopt this concept.

New rules should not become effective until updated version of OST65 is published

12. A common point in several of the Docket 93-62 comments was that the effective date of the rules implementing the ANSI 1992 standard should not become effective until an updated version of Office of Science and Technology Bulletin No. 65, "Evaluating Compliance with FCC-specified Guidelines for Human Exposure to Radiofrequency Radiation," October 1985, is published. SBE concurs with this approach. Such an updated version of OST65 needs to provide formulas for broadcasters and others to use to predict induced and contact currents in certain situations, to avoid having to visit a site to make measurements of induced and contact currents in all cases. This updated version of OST65 should also provide guidelines under which no measurements of induced or contact currents will be deemed necessary, based on the predicted E or H fields being a sufficiently small fraction of the maximum permissible exposure (MPE).

SBE agrees that Commission should recognize RF protective clothing as an acceptable mitigation measure

13. The SBE agrees with CBS *et al*, Hammett & Edison, Jules Cohen & Associates, and NAB that the use of suitable RF protective clothing should be recognized by the Commission as an acceptable mitigation measure for on-tower exposures, and, in some cases, for ground-level exposures in controlled areas. The SBE sees the recent development of apparently effective, practical, and reasonably priced (approximately $920 for a complete suit, including shoe coverings, gloves, and hood) RF protective clothing as the one bright spot in the RFR regulatory environment that broadcasters and its members must now learn to live with.

SBE agrees that Commission should also adopt ANSI/IEEE C95.3-1991

14. Virtually all of the Docket 93-62 commenters urge the Commission to also adopt ANSI/IEEE C95.3-1991, which addresses measurement protocols. SBE concurs. While ANSI C95.3-1991 is not as helpful as it could be, because of its failure to define a "standard man" so as to limit the universe of human sizes that could be placed in a given RF field for induced body

current measurements, the SBE has no difficulties with any of the measurement protocols that are included in C95.3-1991. Indeed, the SBE particularly applauds the minimum separation distance of 20 centimeters specified in Section 5.3.6.3 for near-field survey instruments.

Summary

15. The Commission should adopt ANSI 1992, but with a moratorium on the requirement to measure induced or contact currents from above-30 MHz emitters. The Commission should pre-empt state, county, and local government entities from enforcing any RFR standards more stringent than adopted here, and require those bodies to adhere to any regulatory policies adopted by the Commission in this proceeding. The Commission must absolutely pre-empt the pending proposal by the State of New Jersey to start licensing the antennas of broadcast and other stations, and to create an environmental review process that duplicates the environmental review already conducted at the federal level. An updated version of OST65 should be published, and the Commission should adopt ANSI/IEEE C95.3-1991 as the recommended guideline when measuring high-level radio frequency fields. Finally, the Commission should recognize the use of RF protective clothing as a suitable mitigation technique.

Respectfully submitted,
Society of Broadcast Engineers, Inc.

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April 25, 1994

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